

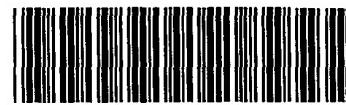
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TECH CENTER 1600/2900



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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002 R6

TIME: 14:19:20

Input Set : A:\620_58.app

Output Set: N:\CRF3\05092002\I722377.raw

4 <110> APPLICANT: Schulze-Lefert, Paul MJ
5 Panstruga, Ralph
6 Buschges, Rainer
8 <120> TITLE OF INVENTION: Polynucleotide and its use for modulating a defence
9 response in plants
11 <130> FILE REFERENCE: 620-58
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/722,377
C--> 14 <141> CURRENT FILING DATE: 2000-11-28
16 <150> PRIOR APPLICATION NUMBER: PCT/GB97/02046
17 <151> PRIOR FILING DATE: 1997-07-29
19 <150> PRIOR APPLICATION NUMBER: GB 9615879.5
20 <151> PRIOR FILING DATE: 1996-07-29
22 <150> PRIOR APPLICATION NUMBER: GB 9622626.1
23 <151> PRIOR FILING DATE: 1996-10-30
25 <150> PRIOR APPLICATION NUMBER: GB 9704789.8
26 <151> PRIOR FILING DATE: 1997-03-07
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30 <170> SOFTWARE: PatentIn Ver. 2.1
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33 <211> LENGTH: 533
34 <212> TYPE: PRT
35 <213> ORGANISM: Hordeum vulgare
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42 20 25 30
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45 35 40 45
47 His Lys Lys Ala Leu Trp Glu Ala Leu Glu Lys Met Lys Ala Glu Leu
48 50 55 60
50 Met Leu Val Gly Phe Ile Ser Leu Leu Ile Val Thr Gln Asp Pro
51 65 70 75 80
53 Ile Ile Ala Lys Ile Cys Ile Ser Glu Asp Ala Ala Asp Val Met Trp
54 85 90 95
56 Pro Cys Lys Arg Gly Thr Glu Gly Arg Lys Pro Ser Lys Tyr Val Asp
57 100 105 110
59 Tyr Cys Pro Glu Gly Lys Val Ala Leu Met Ser Thr Gly Ser Leu His
60 115 120 125
62 Gln Leu His Val Phe Ile Phe Val Leu Ala Val Phe His Val Thr Tyr
63 130 135 140
65 Ser Val Ile Thr Ile Ala Leu Ser Arg Leu Lys Met Arg Thr Trp Lys
66 145 150 155 160

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Input Set : A:\620_58.app
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68 Lys Trp Glu Thr Thr Ser Leu Glu Tyr Gln Phe Ala Asn Asp
 69 165 170 175
 71 Pro Ala Arg Phe Arg Phe Thr His Gln Thr Ser Phe Val Lys Arg His
 72 180 185 190
 74 Leu Gly Leu Ser Ser Thr Pro Gly Ile Arg Trp Val Val Ala Phe Phe
 75 195 200 205
 77 Arg Gln Phe Phe Arg Ser Val Thr Lys Val Asp Tyr Leu Thr Leu Arg
 78 210 215 220
 80 Ala Gly Phe Ile Asn Ala His Leu Ser Gln Asn Ser Lys Phe Asp Phe
 81 225 230 235 240
 83 His Lys Tyr Ile Lys Arg Ser Met Glu Asp Asp Phe Lys Val Val Val
 84 245 250 255
 86 Gly Ile Ser Leu Pro Leu Trp Gly Val Ala Ile Leu Thr Leu Phe Leu
 87 260 265 270
 89 Asp Ile Asn Gly Val Gly Thr Leu Ile Trp Ile Ser Phe Ile Pro Leu
 90 275 280 285
 92 Val Ile Leu Leu Cys Val Gly Thr Lys Leu Glu Met Ile Ile Met Glu
 93 290 295 300
 95 Met Ala Leu Glu Ile Gln Asp Arg Ala Ser Val Ile Lys Gly Ala Pro
 96 305 310 315 320
 98 Val Val Glu Pro Ser Asn Lys Phe Phe Trp Phe His Arg Pro Asp Trp
 99 325 330 335
 101 Val Leu Phe Phe Ile His Leu Thr Leu Phe Gln Asn Ala Phe Gln Met
 102 340 345 350
 104 Ala His Phe Val Trp Thr Val Ala Thr Pro Gly Leu Lys Lys Cys Tyr
 105 355 360 365
 107 His Thr Gln Ile Gly Leu Ser Ile Met Lys Val Val Val Gly Leu Ala
 108 370 375 380
 110 Leu Gln Phe Leu Cys Ser Tyr Met Thr Phe Pro Leu Tyr Ala Leu Val
 111 385 390 395 400
 113 Thr Gln Met Gly Ser Asn Met Lys Arg Ser Ile Phe Asp Glu Gln Thr
 114 405 410 415
 116 Ser Lys Ala Leu Thr Asn Trp Arg Asn Thr Ala Lys Glu Lys Lys Lys
 117 420 425 430
 119 Val Arg Asp Thr Asp Met Leu Met Ala Gln Met Ile Gly Asp Ala Thr
 120 435 440 445
 122 Pro Ser Arg Gly Ser Ser Pro Met Pro Ser Arg Gly Ser Ser Pro Val
 123 450 455 460
 125 His Leu Leu His Lys Gly Met Gly Arg Ser Asp Asp Pro Gln Ser Ala
 126 465 470 475 480
 128 Pro Thr Ser Pro Arg Thr Gln Gln Glu Ala Arg Asp Met Tyr Pro Val
 129 485 490 495
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 137 Ser Phe Ser Gln Gly
 138 530
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/722,377

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150 ctgcggcatt gtttcagca ccggcacaag aaggccctgt gggaggcgct ggagaagatg 180
151 aaggcggagc tcatgtcggt gggcttcata tccctgtcc tcatcgac gcaggacc 240
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154 ctcatgttca cggcagctt gcaccagctg cacgttca tcttcgtgtc cgccgtcttc 420
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157 cggttcacgc accagacgtc gttcgtaag cgcoacctgg gcctctccag caccctggc 600
158 atcagatggg tgggtggcctt ctccaggcag ttcttcaggat cagtcaccaa ggtggactac 660
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185 accgaggggcc gcaagcccgat caagtacgtt gactactgcc cggagggtgag cagcagagcc 180
186 cggaccagca gcttcacgtt gatgaagaaa tcaataccga acttttttctt gttttttctt 240
187 gattgtcgatc ttggcttgc ttaattgggt tggatgtgtt tggatgttgcagg gcaagggtggc 300
188 gtcatgtcc acgggcagct tgcaccagct gcacgttcc atctcgatc tcgcggctt 360
189 ccatgttcc tacagcgatca tcaccatagc tctaaggccgtt ctcaaatgtt gcttttgc 420
190 ctcttc ttcctttacc gcacgtctgtt ctgcaggccg tacctacccgtt ttcacatcgac 480
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193 tccccactc tgcaatctcc ccttccatc aaccacccat gatgtatccat taaaagacgc 660
194 aggcacgatc agatgtatgtt aactgtatgtt ttttgcgtt ttttgcgtt tcagatccgt 720
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002
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 198 gtggccttct tcaggcagtt cttcaggtca gtcaccaagg tggactacct gaccttgagg 960
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 214 gccaccgatg aacttgcgtt gtaacatggg tgtcaaggca ccgagtgccg ctgtatgaact 1920
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 241 tgatgtcgac aaagagcatg caccagctgc acatttcat ttcgtgtc ggcgtgttcc 360
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 245 tggttttaga tgaagaaatg gaagaagggtt gaggcacaga ccaactcattt ggatgtatcag 600
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PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002
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254 ttaatggttt tagcttcttc tctttgcag gcgcatttg tcgcagaata gcaagttcg 1140
255 cttccacaaa tacatcaaga ggtcttgcgg ggacgacttc aaagttgtcg ttggcatcg 1200
256 gtccgtccctc gcttattaa ttataggact ttatattca acatttttt tataaagaaa 1260
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259 tggcttattt cattttttt tttactctca aaaccttgcgg ctgaatttttgc ttataatca 1440
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283 gagggccgca agcccgaaat gtcgttgc ttttgcgg aggtgagcag cagagccgg 180
284 accagcactt tcacatgtat gaaatccatca ataccgaact ttttcttgcgtt ttcttctgtat 240
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296 ttttccatgc ttcgttgcgttgc ttcgttgcgttgc ttcgttgcgttgc ttcgttgcgttgc 960
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/09/2002
PATENT APPLICATION: US/09/722,377 TIME: 14:19:21

Input Set : A:\620_58.app
Output Set: N:\CRF3\05092002\I722377.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:35; Xaa Pos. 10,17,19,47
Seq#:37; Xaa Pos. 6
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/722,377

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Output Set: N:\CRF3\05092002\I722377.raw

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:240
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420
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L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1440
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1560
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1620
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1860
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1920
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2040
L:1556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:16
L:1559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:32
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:80
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16
L:1692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:1756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:80
L:1795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16
L:1841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:1847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:32
L:1850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:48
L:1853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:64
L:1892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:1895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32
L:1931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:16
L:2043 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:2082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:2085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:16
L:2091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:48
L:2118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:2154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:2186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60
L:2187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120
L:2188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:180

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002
TIME: 14:19:21

Input Set : A:\620_58.app
Output Set: N:\CRF3\05092002\I722377.raw

L:2189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:240
L:2190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:300
L:2191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:360
L:2212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60